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On the term electricity in the physics course books for primary school

Extended summary

In this paper, we are critically observing legislative, professional and methodological justification of definition of the term electricity in physics course books for primary schools, critical studying of terminology is initiated in the course books. In this way, this term is built up and connected to other terms of the curricula Electrical field, Load, Energy, and Power and there be pathways showing greater compatibility of the term.

The term electricity is comprehensible (conscious) knowledge about the essence about contemporary physics and official metrology gives the name electricity. According to consensual definition of this term, the word is about the determined (scalar) physical value (current of electricity and speed of electricity) which physical appearance defines with the name of organized moving of free holders of electricity.

Consensus of contemporize physics and metrology is about the term electrification: it is about (scalar) physical value, i.e. about greatness of a certain physical term of certain material objects, i.e. carriers of electrification.

Analysis of the contents of the course book of physics for the 8th grade, it has been determined that in most cases the term electricity is explicitly introduced and defined as physical (mechanical) appearance (directed moving of electrified parts) and implicitly, it was prepared, widened and connected to other terms as if the material object were in question which is characterized by speed and energy, which as an active object can do faster or slower work.

It has also been determined that, during defining, deepening and application of the term electricity, consensus term electrification got other, unsuitable names are used such

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as quantity of electrification and electrification is used as a synonym for a material object (bearer of electrification).

Since there is insufficient defining of the term electricity and insufficient terminology upon which this term is being built up in the course books (and teaching praxis), sources for many students' difficulties and misunderstandings, the paper has the aim of: a) stimulating the authors of physics course books to improve the term electricity and to lessen terminological obstacles which the student finds in the attempts in the efforts of building up this term into his own, existing system of physical terms; 6) Ministry of education should in the curricula, study the terms Electrical field, Electricity, Work, Energy, Power, and to adjust them to the theory of EM field.

Key words: physics course books, definition of electricity, and source of electricity, work, power and energy of electricity.

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